Mark Scheme (Results)

Summer 2017

Pearson Edexcel GCE
In Music Technology (6MT02)
Paper 01 - Listening and Analysing

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Summer 2017
Publications Code xxxxxxxx*
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SECTION A

Answer ALL questions

Write your answers in the spaces provided or, where appropriate, choose an answer and put a cross in the box [X]. If you change your mind about an answer, put a line through the box [~~X~~] and then mark your new answer with a cross [X]

1. ABBA: Under Attack

Track 1: music begins at xxx

a) What is the tempo of this song?

C. 115 bpm

(1)

b) How is the effect at 0'30" on the line 'You know that I'm nobody's fool' achieved?

Vocoder

(1)

c) How does the arrangement change at 1'01"?

- **Sustained synth chords / pads added**
- **High string (synth) added**
- **Additional backing vocals**

(1)

d) (i) Describe the delay on the lead vocal in the verse.

- **Short / slapback / <200ms**
- **Semiquaver / 16th rate**
- **One or two repeats / low feedback**
- **Panned centrally with the original signal**
- **Delayed signal less bright**
- **Delayed signal quieter / fades**

(2)

(ii) Describe the changes in the reverb and delay settings on the lead vocal at the following points:

0'44"	**Delay (allow reverb) removed / dryer (1)**
1'32"	**Added reverb (1)** **NOT reverb time increased**

e) Which of the following best represents the rhythm of the bass line in the first three bars? Puts a cross in the correct box.

C

(1)

f) Describe the filtering on the repeated synth quavers between 0'17" and 0'25".

- **LPF/Low Pass Filter**
- **Low resonance / Q**
- **Envelope / ADSR**
- **Cutoff decreasing on each note**
- **Short attack**
- **Short decay**
- **Low sustain**
- **Short release**

(2)

(Total for question 1 = 10 marks)

2. Gentle Giant: The Advent Of Panurge

a) When was this track recorded? Put a cross in the correct box.

B. 1966-1975

(1)

b) How is the style of this music best described? Put a cross in the correct box.

D. Prog Rock

(1)

c) Describe the panning of the following instruments between 0'48" and 0'57".

Bass guitar	**Centre**
Organ	**Right / R**
Piano	**Left / L**

Ignore additional qualifying words

(3)

d) Which term best describes the vocal texture between 0'17" and 0'22"? Put a cross in the correct box.

D. Polyphonic [ ]

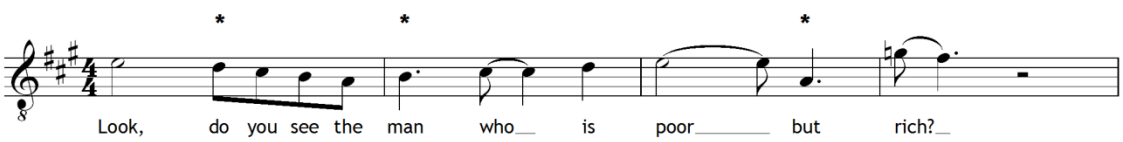
(1)

e) Name the solo instrument that enters at 1'51"

Trumpet / cornet / flugelhorn

(1)

f) Fill in the **three** missing pitches from the vocal line between 0'09" and 0'14".



(3)

(Total for question 2 = 10 marks)

3. Air: La Femme D'Argent

a) Listen to the bass line between 0'26" and 1'01". Describe how the rhythm changes at 0'50".

- **Less syncopated**
- **More sustained / long notes / allow semibreve**
- **Less rhythmic movement/fewer notes/more static**
- **(First two notes) staccato**
- **No ornamentation**

(2)

b) Describe the delay on the organ chords from 1'38".

- **Quaver/semiquaver delay time / 150-230ms**
- **Gradually decays / delayed signal is quieter**
- **Several audible repeats / medium-high feedback (not long feedback)**
- **Delay is panned right / moves right**

(2)

c) From 4’02”, the chords are played by an upright piano.

(i) Identify **one** potential problem in capturing sound from an upright piano and provide **one** solution.

Problem	Solution
Strings are inaccessible / enclosed	Open the lid/ Take off the front panels/Move it away from the wall and mic it from behind
Mechanical noise	Oil pedal/Change mic position
Too much hammer noise	Move mics away from hammers
Large physical sound source	Use stereo mics
Too much ambience	Move mics closer / use acoustic screens
Hole in the middle	Don’t pan as wide / move mics closer together / third mic in the middle / X-Y pair instead of spaced pair
Capture the full range of notes, low and high	Use two mics, one on the low notes, one on the high notes

Only credit capture solutions, not mixing solutions

Only credit solutions that match the problem.

(2)

(ii) Describe the EQ on the piano.

- **Restricted EQ (boxy) / Band pass / mid heavy**
- **Lacking HF content / quite dull / LPF**
- **Lacking LF content / thin / HPF**

(1)

d) *Name the percussion instrument that enters at 4’50”.

Tambourine

Accept only this spelling

(1)

e) Listen to the synth glissandos between 2’02” and 2’15”. Which combination of effects has been used? Put a cross in the correct box.

B. Delay and reverb

(1)

f) What is the LFO routed to in order to provide the modulation on the synthesiser between 4’38” and 5’20”?

A. Cut-off frequency

(1)

(Total for question 3 = 10 marks)

4. Alice In Chains: Lab Monkey

a) What is the interval between the two notes of the lead vocal between 00'36" and 00'44"? Put a cross in the correct box.

A. Minor second

(1)

b) (i) This track could be described as being inspired by grunge. Identify three stylistic elements of grunge heard in this recording.

- **Riff based**
- **Guitar based**
- **Power chords**
- **Heavy distortion**
- **Relatively slow tempo**
- **Dropped tuning**
- **Dissonant harmony/melody**
- **Minor**
- **Repetitive**
- **Technically unchallenging guitar solo**
- **Heavily compressed drums**
- **Big reverb on the drums**

(3)

(ii) What common textural element of grunge is missing?

- **Quiet, less distorted verse / clean guitar**
- **Dynamic contrast**
- **Shouted / aggressive vocal**

(1)

c) How does the mix change at 1’30”

- **Reduced level on guitar tracks**
- **Vocals more prominent**
- **Accept valid texture change in guitar parts e.g. fewer guitar parts / less distortion on guitars**

(1)

d) Describe how the vocals are mixed between 2’06” and 2’22”.

- **Panned across the spectrum**
- **Low in the mix / lead vocal not prominent**
- **Lead vocal on a par with BV’s**
- **Double tracking / automatic double tracking / chorus**

(2)

e) Describe how the main guitar riff has been mixed to create a thicker texture. This can be most clearly heard at 2’22”.

- **Double tracked**
- **Stereo delay**
- **Panned opposite**
- **Distortion**
- **LF boost / HF boost / mid cut**

(2)

(Total for question 4 = 10 marks)

SECTION B

Answer BOTH questions

Special focus style – Rock And Roll

5. Beverley Knight: Ain't Nothin' But A Kiss

a) Using the given headings, complete the table below to identify **six** different elements of Rock and Roll heard in this track.

Rhythm	• Shuffle/swung • Triplets / 12/8 • Syncopation • Grace notes/acciaccaturas • Rhythmic stops
Harmony	• 12 bar blues / I/IV/V • 7^{th} chords • Blue notes / flattened 3^{rd} / blues scale / blues harmonies • Open 5^{th}s • Major key
Performance techniques in piano solo from 0'44"	• Grace notes/acciaccaturas • Repeated triplets • Glissando, allow slide • Open 5^{th}s/chordal • Octaves • Uniform volume/all loud

NB: Do not credit the same response twice.

(6)

b) Name the keyboard instrument on this track that is not commonly heard in 50's Rock and Roll.

Organ / Hammond

(1)

c) (i)How would guitar distortion have been created in the 1950's?

- **Overdriving the amp**
- **Increasing the gain**

Not slashed cone

(1)

(ii) Identify one other way of creating guitar distortion in 2017.

- **Pedals**
- **Plugins / software**
- **Amp simulators**
- **Distortion channel on amp**
- **Overdriving the amp [if not credited in part i]**
- **Increasing the gain [if not credited in part i]**

(1)

d) This track was recorded in 2015. Without reference to guitar distortion, identify **six** ways in which the production differs from Rock and Roll tracks recorded in the 50's.

- **Stereo**
- **Multiple mics / close mic'ed**
- **No spill**
- **Multitrack recording / allow overdubbing**
- **Direct injection**
- **Clear mix**
- **No masking of instruments**
- **No distortion on vocals/drums**
- **No hiss / noise**
- **Full frequency response**
- **More compression**
- **Mastered at a higher level**
- **De-esser**
- **No use of slap back**
- **Drums well balanced**
- **Digital reverb**
- **DAW / software / plug ins / digital recording**
- **Automation**
- **Digital editing / quantise**
- **Pop shield / no plosives**
- **Allow autotune / pitch correction**

(6)

e) *How did Sun Records contribute to the development of rock and roll? You should support your answer with reference to an artist.

- **Run by Sam Phillips**
- **Who had eclectic tastes / variety of styles**
- **Recorded local talent**
- **(Mixing) country / blues / gospel**
- **Led to rockabilly**
- **White singers singing blues derived music**
- **Popularising 'race music' for white audiences**
- **Helped spread rock and roll from local radio audiences to the mainstream**
- **Kept the instrumentation sparse and immediate**
- **Raw, energetic performances**
- **Use of slap back**
- **Use of echo chambers**
- **Extremely prolific**
- **Artists will include Elvis Presley, Johnny Cash, Roy Orbison, Jerry Lee Lewis, Carl Perkins et al**
- **AOVP**

Credit 4 marks for general bullet points and 1 mark for an appropriate artist.

(5)

(Total for question 5 = 20 marks)

Special focus style – Rap and Hip Hop

6. Jessie J: Wild (show and prove remix) feat. Big Sean and Dizzee Rascal

a) Describe the tonality of the chorus.

modal / minor / Aeolian / B minor / Bm

If any of these terms are present in the response, then mark correct.

(1)

b) Describe two ways in which the vocal sample starting at 0'05" has been treated.

- **Pitch shift / time stretched**
- **Volume fades in**
- **Variable cut-off frequency / EQ sweeps / LFO**
- **Low pass filter/LPF**
- **High and low cut / mids boosted / band pass filter**
- **Moving panning**
- **Cutting / looping / triggered / reversed**

(2)

c) Which best describes the rhythm of the snare sample between 0:12 and 0:14? Put a cross in the correct box.

D. Triplet crotchets and triplet quavers

(1)

d) Listen to the chorus between 0‘41” and 0‘47”.

(i) Fill in the boxes to identify the synth chords.

Bm	**A(maj)**	Gmaj

If I go hard, let me tell you that it’s worth it

Dmaj	**A(maj)**	**Bm**

Play the right cards, I ain’t afraid to work it

(3)

(ii) Name the vocal technique that the singer uses on the words ‘hard’ and ‘cards’.

Tremolo / tremolando / vibrato / vib

If any of these terms are present in the response, then mark correct.

(1)

e) What phrase best describes the steps in the rising synth at 1’01”? Put a cross in the correct box.

C. Microtonal [ ]

(1)

f) Describe how the rhythmic feel changes at 1’08”.

Half time

(1)

g) What controller has been used to modify the synth’s pitch at 1’08” – 1’22”

Portamento / glide / 5 / 65 / 84

(1)

h) What editing techniques have been used on the vocal sample between 2'37" and 2'45"?

- **Cut up / truncated**
- **Copy / paste / looped / triggered / multiple repeats**
- **Stuttered**
- **Pitch bend / shift**
- **Rhythmic diminution**

(3)

i) (i) Listen to the section between 1'36" and 2'03".Describe how the mix of the bass synth changes at 1'50".

- **Louder / more upfront**
- **Brighter**

(1)

(ii) Give a reason for this change.

- **To signify a new section in the song**
- **It's the only melodic element**
- **To signify the difference between the two artists**
- **Textural contrast**

(1)

j) *Outline the key features of old school rap music in the late 70's and early 80's. You should reference an important artist in your answer.

- **Derived from soul / funk / disco**
- **DJ / use of turntables (vinyl)…**
- **… to create breaks / loops.**
- **Drum machine / (TR)808 / (TR)909**
- **Synthesisers**
- **Loops performed rather than sampled**
- **Block parties made the genre popular / breakdancing / graffiti artist**
- **MC / toasting…**
- **…which was derived from dub…**
- **… which evolved into rapping.**
- **Less rhythmically complex than later rap / less syncopated**
- **Political lyrics / racism**
- **Artists may include Afrika Bambaataa, Run DMC, Public Enemy, Sugarhill Gang, Beastie boys, Grandmaster Flash, DJ Kool Herc etc.**
- **AOVP**

Credit 3 marks for general bullet points and 1 mark for an appropriate artist.

(4)

(Total for question 6 = 20 marks)